Experience in Working the "Rechnaya Sosnovka" Gravel and Sand Quarry

wide belts. The metal clips, which are often used for joining the belts, are also unsatisfactory. It is recommended that the scientific and research institutions should devise a better method of joining the conveyor belts. The cleaning devices of the existing mechanical scrapers should be improved as large amounts of clay remain in the scrapers. A sand-settling machine is used as an intermediate device between the sorting-washing machine and the drag-sand washing machine. In the C-216 washing machine, the connecting links of the chain gear often become damaged. There are 3 figures.

AVAILABLE: Library of Congress

Card 3/3

1. Sand-Sources-USSR 2. Gravel-Sources-USSR 3. Building materials 4. Construction-Equipment 5. Quarries-USSR

ASTAKHOV, I.I., glav. red.; ANSIN, A.N., red.; IVANOV, D.A., red.; KORNILOV, M.F., doktor sel'khoz. nauk, red.; KONYUKHOV, V.N., kand. sel'khoz. nauk, red.; MARKITANTOVA, A.V., uchenyy sekretar', red.; SAPOZHNIKOV, N.A., red.; DMITRIYEV, N.N., red.

[Science in the service of agricultural production; collection of scientific and technical information] Nauka - sel'skokhoziaistvennomu proizvodstvu; sbornik nauchno-tekhnicheskoi informatsii. Leningrad, Lenizdat, 1964. 143 p. (MIRA 17:3)

1. Leningrad. Severo-zapadnyy nauchno-issledovatel'skiy institut sel'skogo khozyaystva.

KLYUCHNIKOV, Boris Vladimirovich, kand. tekhn. nauk; DMITRIYEV, N.N., red.

[Machinery for land reclamation and peat harvesting; a brief handbook] Mashiny dlia meliorativnykh rabot i dobychi torfa; kratkii spravochnik. Leningrad, Lenizdat, 1964. 150 p. (MIRA 18:7)

DROZDOV, I.P.; GAVRILOV, I.S.; DMITRIYEV, N.N., red.

[Each farm should be provided with a cultivated pasture] Kazhdomu khoziaistvu kul'turnoe pastbishche. Leningrad, Lenizdat, 1965. 114 p. (MIRA 18:10)

DMITRIYEV, N.P., inzh.

Hard facing of rolls for the crushing of building materials.
Svar. proizv. no.6:34-35 Je '61. (MIRA 14:6)

1. Inzhenerno-stroitel'nyy institut im. V. V. Kuybysheva.
(Hard facing)
(Crushing machinery)

DMITRIYEV, N. D.

Butt welding by the flash method. Stan.i instr. 24 no.12:20 D '53.
(MLRA 7:1)
(Electric welding)

RYBAKOV, Vasiliy Mikhaylovich, kand. tekhn. nauk; [illegible], Nikolay Petrovich, inzh.; TSEGEL'SKIY, V.L., [illegible] red.

[Welding of steel structures] Svarka stal'nykh konstruktsii. Moskva, Stroiizdat, 1965. 153 p. (MIRA 18:3)

DMITRIEV, N.P.

25131. DMITRIEV, N.P. Ispol'zovanie Travy Gornykh Senokosov Severnogo Kaukaza-sots. Zhivotnovodstvo, 1949, No.3. S. 58-60

SO: Letopis' No. 33, 1949

DMITRIYEV, N. P.

Dmitriyev, N. P. "North Caucasian mountain two-crop purple esparsette," Selektsiya i semenovodstvo, 1949, No. 3, p. 74-75

SO: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 14, 1949).

DMITRIYEV, N.S.

Insert for the elimination of uncalled-for shifting of the bar on AT-175 loom dobbies. Obm.tekh.opyt. [MLP] no.15:22 '56. (Looms) (MIRA 11:11)

DMITRIYEV, N.S.

Device for the protection of bolts of fabric. Obm.tekh.opyt. [MLP] no.15:22-23 '56. (MIRA 11:11)
(Textile fabrics)

SOV/81-59-10-35102

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 10, pp 252-253 (USSR)

AUTHOR: Dmitriyev, N.S.

TITLE: On Friction Resistance in a Two-Phase Flow

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1958, Nr 74, pp 189-196

ABSTRACT: The motion of a mixture of liquid and gas in a vertical pipe has been considered theoretically, assuming the existence of a ring layer of the liquid at the pipe walls, the constancy of the gas content in the liquid and of its specific gravity, the isothermal properties of the flow, and the absence of pulsations in it. The dependence of the friction force against the walls of a smooth pipe on the pipe radius, the viscosity, the density and the motion velocity of the liquid has been established. The relationships have been derived for the determination of the coefficient of resistance and the specific pressure drop in the pipe, which have been confirmed by experimental data (Armand, A.A., Nevstruyeva, Ye.I., Izvestiya VTI, 1950, Nr 2).

V. Gertsovskiy

Card 1/1

DMITRIYEV, N.S.

Analytic study of pressure drop in the upward flow of a gas-liquid mixture through a vertical pipe. Trudy Ural. politekh. inst. no.79: 1-14 '59. (MIRA 13:7)

(Boilers)

DMITRIYEV, N.S.

Concerning the gas content in the pressure flow of a gas-liquid mixture. Trudy Ural politekh. inst. no.76:149-157 '60. (MIRA 16:6)

(Gas dynamics)

DMITRIYEV, N.S.

Laws governing frictional resistance in fluid flow in pipes.
Trudy Ural. politekh. inst. no.113:10-16 '61. (MIRA 16:8)

(Frictional resistance (Hydrodynamics))

DMITRIYEV, N.S.

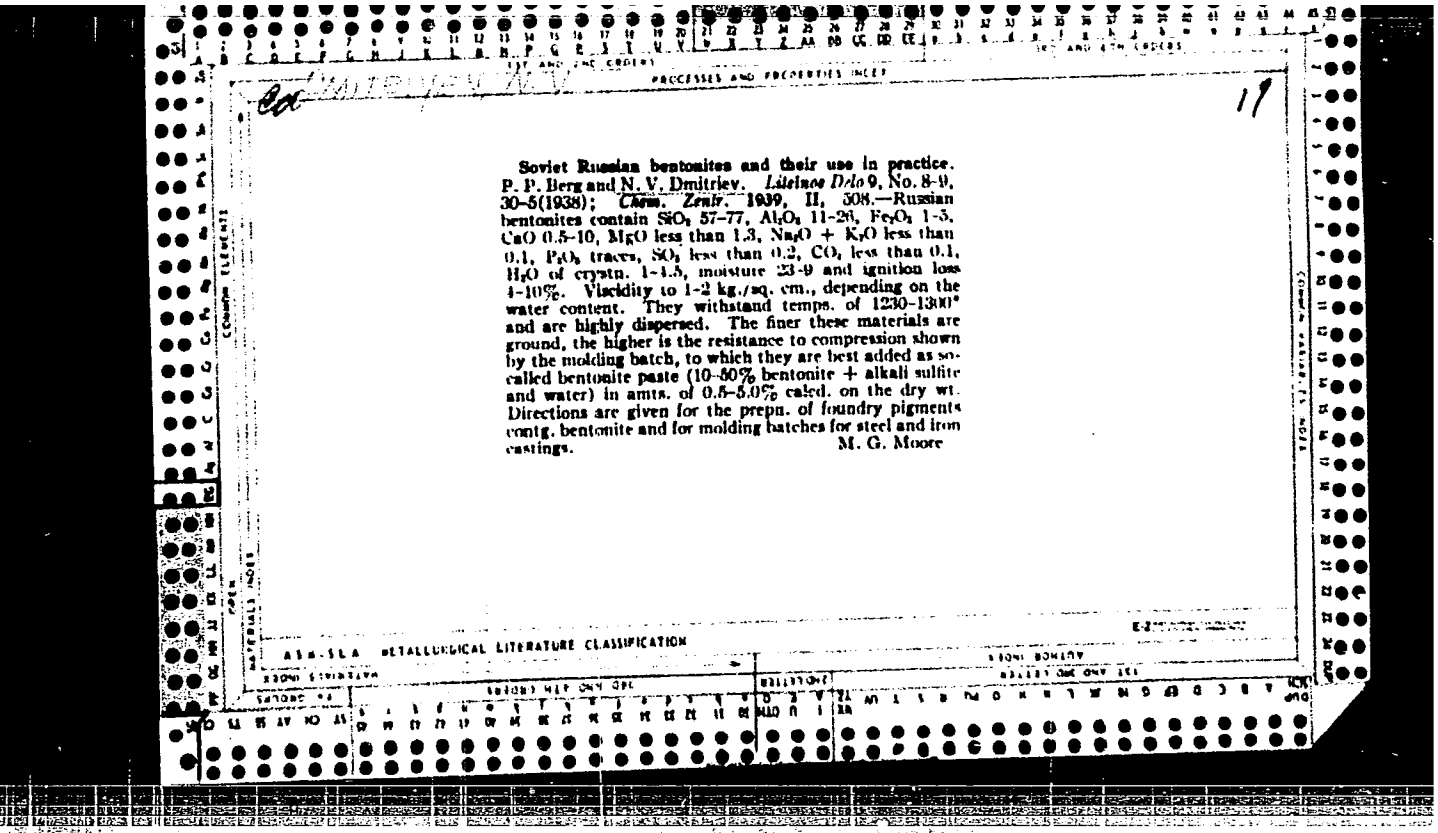
Theoretical formula for the coefficient of frictional resistance in turbulent flow in pipes. Trudy Ural. politekh. inst. no.113: 103-109 '61. (MIRA 16:8)

(Frictional resistance (Hydrodynamics))

DMITRIYEV, N.S., inzh.

Laws governing pressure drop in an unheated two-phase flow. Izv. vys. uchab. zav.; energ. 6 no.12:73-80 D '63. (MIRA 17:1).

1. Ural'skiy politekhnicheskiy institut imeni Kirova. Predstavlena kafedroy kotel'nykh ustanovok.



Soviet Russian bentonites and their use in practice. P. P. Berg and N. V. Dmitriev. *Liteinoe Delo* 9, No. 8-9, 30-5(1938); *Chem. Zentr.* 1939, II, 508.—Russian bentonites contain SiO_2 57-77, Al_2O_3 11-26, Fe_2O_3 1-5, CaO 0.5-10, MgO less than 1.3, $Na_2O + K_2O$ less than 0.1, P_2O_5 traces, SO_3 less than 0.2, CO, less than 0.1, H_2O of crystn. 1-4.5, moisture 23-9 and ignition loss 4-10%. Viscidity to 1-2 kg./sq. cm., depending on the water content. They withstand temps. of 1230-1300° and are highly dispersed. The finer these materials are ground, the higher is the resistance to compression shown by the molding batch, to which they are best added as so-called bentonite paste (10-50% bentonite + alkali sulfite and water) in amts. of 0.5-5.0% calcd. on the dry wt. Directions are given for the prepn. of foundry pigments contg. bentonite and for molding batches for steel and iron castings.

M. G. Moore

KOTUL'SKIY, V.V., inzh.; DMITRIYEV, N.V., inzh.

Creating an injectable screen in sand-and-gravel soils.
Gidr. stroi. 31 no.7:28-31 Jl '61. (MIRA 14:7)
(Soil percolation)

DMITRIYEV, N.V.

Characteristics of the distribution of mean total monthly precipitation in the U.S.S.R. Trudy TSIP no.108:23-51 '61. (MIRA 14:5)
(Precipitation (Meteorology))

L 34159-65 EEC(b)-2/EWA(c)/EWT(l)/EWT(m)/EWP(b)/T/EWT(t) IJP(c) JD

ACCESSION NR: AP5008137 S/0286/65/000/005/0013/0013

AUTHOR: Tuzovskiy, A. M.; Skakovskiy, I. I.; Pesotskiy, G. S.; Aleshin, A. M.; Shniger, V. E.; Dmitriyev, N. V.

TITLE: Crucible for growing crystals from a melt. Class 12, No. 168639

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 13

TOPIC TAGS: crystal growing, crucible, semiconductor, single crystal

ABSTRACT: This Author Certificate introduces a crucible in which the oxide layer is separated from the melt by a centrally located chamber (see Fig. 1 of the Enclosure). [VS]

ASSOCIATION: none

SUBMITTED: 20Jan64 ENCL: 01 SUB CODE: IE, SS

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3212

Card 1/1

DMITRIYEV, N.YE.

AID P - 4772

Subject : USSR/Aeronautics - maintenance

Card 1/1 Pub. 135 - 30/31

Author : Dmitriyev, N. E., Sen. Technician -Lt.

Title : The combination stands - are they necessary?

Periodical : Vest. vozd. flota, 8, 95, Ag 1956

Abstract : Instead of one combination stand, the author suggests several separate portable and stationary stands for checking of radio equipment.

Institution : None

Submitted : No date

DMITRIYEV, N.Ye.

Complications following smallpox vaccination. Sov.med. 26 no.10:128-129 O '62. (MIRA 15:12)

1. Iz gorodskoy bol'nitsy (glavnyy vrach L.M.Mikhaylov) Bugul'my Tatarskoy ASSR.
(ANAPHYLAXIS) (VACCINATION)

L 08837-67 EWT(1) SCTB DD/GD

ACC NR: AT6036683 SOURCE CODE: UR/0000/66/000/000/0384/0385

AUTHOR: Chesalin, L. S; Dmitriyev, N. Ye.; Gorbov, F. D.; Novikov, M. A.; Ushakov, V. I.

ORG: none

TITLE: A device for studying interdependent group activity (two to eight operators) /Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966/

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 384-385

TOPIC TAGS: group dynamics, cosmonaut training, cosmonaut selection, space psychology

ABSTRACT: In 1963, two of the authors described a device which could be used to evaluate the behavior of a group of three men during interdependent activity. It was shown that the device could reflect the activity of the group with great accuracy and that evaluation results agreed with some sociological tests despite its simplicity of design. Consequently, a device which could evaluate the interdependent activity of a group of eight men

Card 1/3

was constructed. It consists of eight small, identical panels each consisting of a dial and potentiometer. The experimenter is provided with a large panel consisting of 8 dials which act as doubles of the individual ones. In addition, he has a device indicating the sum of the deviations of all the dials from zero. There are switches permitting exchange between all potentiometers and dials on a second section of the panel.

After standardizing an exchange coefficient, the experimenter feeds current to the subjects' dials. They in turn attempt to reset the dial on zero according to instruction. Each subject sees only his own dial which he himself can only manipulate. When interexchange coefficients are not equal to zero, the problem has an interdependent nature in that all remaining dials move, besides that of the individual subject; each individual dial reflects the disposition of all the potentiometers. This set-up is portable, fitting into two carrying cases and is powered by 4 batteries (40 mamp).

From preliminary experiments it was found that a number of basic situations common to a three-man group are not encountered in the larger, eight man group. The presence of a leader, or group of leaders is perhaps necessary. The device can be used to execute commands, break a group down into separate subgroups, and for a number of other experi-

ments. It seemed desirable to construct special biorecording systems, which could be used in concert with this set-up.

Finally, a reference formula determining the dial reading on the i panel αi (i = 1, 2,... v) is given:

$$L_i = \sum_{k=1}^{8} a_{ik} x_k$$

Here, x_k is the deviation from zero of the potentiometer on the k panel and α_i is the coefficient of the influence of the k potentiometer on the dial. The sum of indicator readings are:

$$a_c = \sum_{i=1}^{8} \sigma_i |a_i|$$

Here δ_i equals zero or one and indicates the position of the additional switch on the panel, which permits the exclusion of some of the dials from the total. [W. A. No. 22; ATD Report 66-116]

SUB CODE: 05 / SUBM DATE: 00May66

DMITRIYEV, N. Z.

PA 63/49T51

USSR/Medicine - Education Jan 49
Medicine - Sanitation

"Ten-Day Course for the Sanitation Doctors in Novgorod, 19 - 27 May 1948," N. Z. Dmitriyev, ½ p

"Gig i San" No 1

Outlines six courses taught during this period by members of the Leningrad Dept of the All-Union Hygienic Soc.

63/49T51

DMITRIYEV, N.Z.; DIKUN, P.P.

Pollution of air by 3,4-benzopyrene in Kalinin. Gig. i san. 24 no.9: 77 S '59. (MIRA 13:1)

1. Iz kafedry gigiyeny Kalininskogo meditsinskogo instituta i Instituta onkologii AMN SSSR.
(KALININ--AIR--POLLUTION) (BENZOPYRENE)

DIOMIDOV, M., [Diomydov, M.] inzh.; DMITRIYEV, O. [Dmytriiev, O.], inzh.

Conquering the blue continent. Znan. ta pratsia no.7:1-3 Jl '61. (MIRA 14:8)

1. Derzhavnyy proyektnyy institut riboprom1slovogo flotu.
(Oceanographic research)

SMOLENSKIY, K.I.; DMITRIYEV, O.A.

Plywood industry in Finland. Der.prom. 7 no.11:28-30 N '58.
(MIRA 11:11)
(Finland--Plywood industry)

SMOLENSKIY, K.I., inzh.; DMITRIYEV, O.A., inzh.

Hardboards made of wood shavings in Finland. Der.prom. 8 Mr '59. no.3:28-31 (MIRA 12:4)

(Finland--Hardboard)

BOTVINIK, Yefim Solomonovich; DMITRIYEV, Oleg Aleksandrovich; GEL'MAN, Moisey Isaakovich; TUPITSIN, Yuriy Semenovich; EL'BERT, Aleksandr Aronovich; VARAKSIN, F.D., red.; LEBEDEVA, I.D., red. izd-va; PARAKHINA, N.L., tekhn. red.

[Use of the continuous method for the manufacture of particle boards]Proizvodstvo struzhechnykh plit nepreryvnym sposobom. Moskva, Goslesbumizdat, 1961. 98 p. (MIRA 15:2)
(Hardboard) (Assembly-line methods)

DMITRIYEV, O.P.

Realization of a possibility of making corrections in single erasure batches with n-k length using a periodic (n,k) code. Trudy nauch. inst. svyazi. no.16:93-96 '63. (MIRA 17:10)

1. Moskovskiy elektrotekhnicheskiy institut svyazi.

ACCESSION NR: AP4029464 S/0108/64/019/004/0068/0075

AUTHOR: Dmitriyev, O. F. (Active member)

TITLE: Class of composite cyclic codes with a simple realization

SOURCE: Radiotekhnika, v. 19, no. 4, 1964, 68-75

TOPIC TAGS: code, cyclic code, composite cyclic code

ABSTRACT: Cyclic codes with a generating polynomial $g(x^p)$ formed by the generating polynomial of a short cyclic code $g(x)$ by means of $x \to x^p$ substitution are considered. The information and checking symbol block $a_0, a_1, \ldots, a_{n-1}$ of such a code consists of p independent generator sequences. Each i-th generator sequence comprises a_{i+pl} where $l=0,1,\ldots,\frac{n}{p}=n_1$; each such sequence is a unit of a short cyclic code with the generating polynomial $g(x)$. The composite cyclic

Card 1/2

ACCESSION NR: AP4029464

codes can correct independent error packets, and their decoding can be reduced to decoding short cyclic codes that correct independent errors. A new method is suggested for decoding short cyclic codes; its application to the composite cyclic codes permits correcting multiple error packets by simple means. For example, a simple Goley code (23, 12) scheme permits setting up a composite cyclic code (690, 360) which will reliably correct three independent error packets, each 30 symbols in length. Orig. art. has: 3 figures, 25 formulas, and 1 table.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi (Scientific and Technical Society of Radio Engineering and Electrocommunication)

SUBMITTED: 02Feb63 DATE ACQ: 30Apr64 ENCL: 00

SUB CODE: DP NO REF SOV: 003 OTHER: 002

Card 2/2

L 12037-65

ACCESSION NR: AP5010961 UR/0286/65/000/007/0136/0136

AUTHOR: Dmitriyev, O. F. 11 16

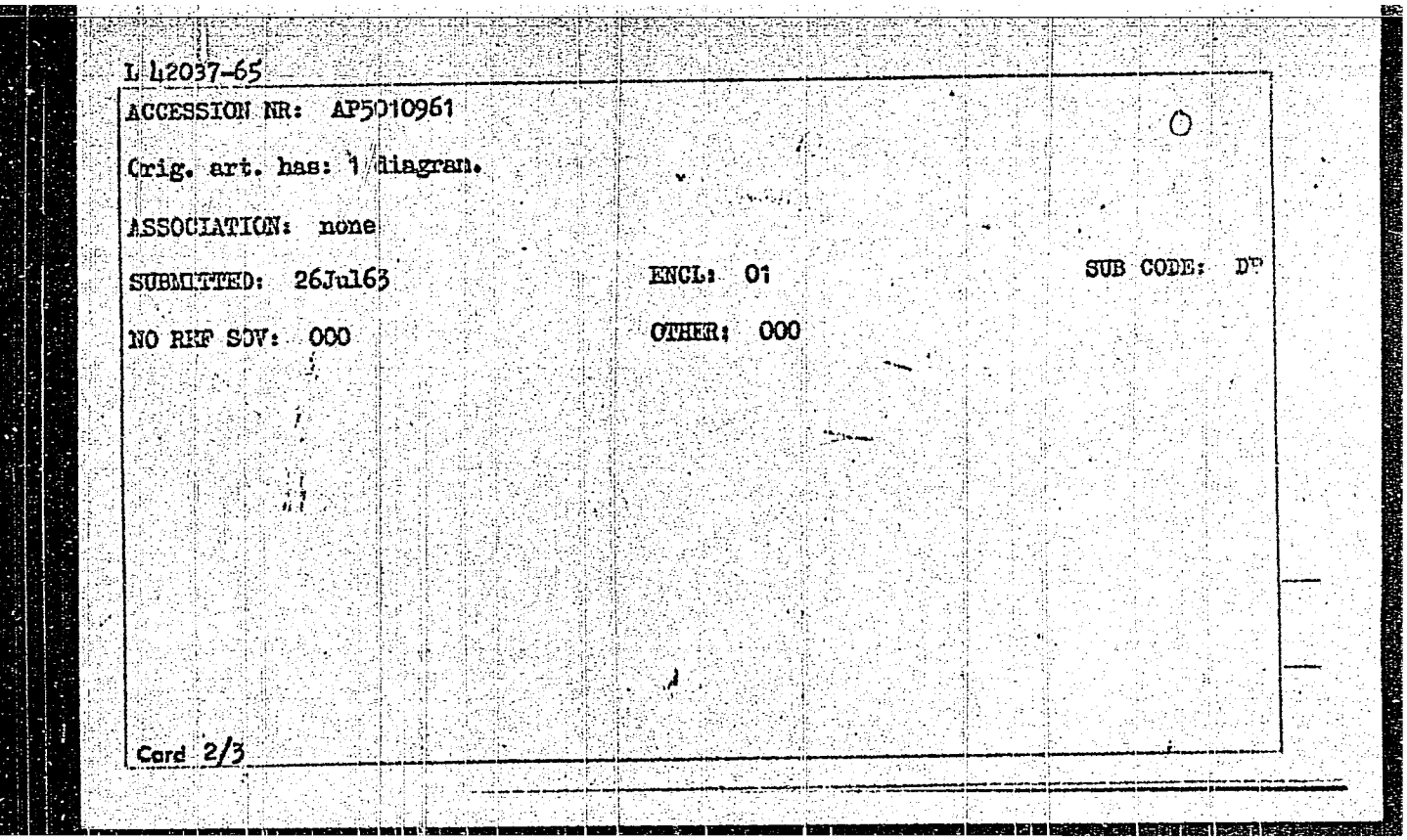
TITLE: Method of correcting an isolated packet of erasures in a block of symbols. Class 42, No. 169894

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 136

TOPIC TAGS: error correction coding

ABSTRACT: This Author Certificate presents a method of correcting an isolated packet of erasures in a block of symbols. The packet of symbols to be erased ai, ai + 1,..., ai + r - 1 of length r in the symbol block of binary cyclic code of length n is changed to zero. This is accomplished by commutating the code feed circuit from the first input of a modulus two summator to its second input through n + 1 cycles from the moment of entry of the first symbol of the block to the input of the hold register and shift register with feedback (see Fig. 1 on the Enclosure). A second switch is closed in the circuit connecting the last shift unit from the second shift register to the first input of the "OR" circuit. The signal from the output of the hold register is fed to the second input of the "OR" circuit. A switch is opened in the feedback circuit of the register with feedback to r cycles.

Card 1/2



L 42037-65

ACCESSION NR: AP5010961

Orig. art. has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 26Jul63 ENCL: 01 SUB CODE: DP

NO REF SOV: 000 OTHER: 000

Card 2/3

VAGINA, V.S.; RASSULOVA, Kh.N.; DMITRIYEV, O.V.

Morbid states following resection of the stomach and their compound treatment. Sbor. nauch. rab. vrach. san.-kur. uchr. profsoiuzov no.1:98-104 '64. (MIRA 18:10)

1. Zheleznodorozhnyy bazovyy sanatoriy imeni XX s"yezda Kommunisticheskoy partii Sovetskogo Soyuza (glavnyy vrach R.S.Chubarov, nauchnyy rukovoditel' kand.med.nauk Yu.S.Vishnevskaya).

DMITRIYEV, Oleg Vladimirovich; ZHEREBKOV, I.V., red.; MARINYUK, M.V., tekhn.red.

[Reinforcement wires with large cross sections] Struny bol'shogo secheniia. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1960. 146 p. (MIRA 14:2)

1. Nauchno-issledovatel'skiy institut po stroitel'stvu v Rostove-na-Donu Akademii stroitel'stva i arkhitektury SSSR (for Dmitriyev).
(Reinforced concrete) (Wire)

DMITRIYEV, O.V., inzh.

Reinforcements for prestressed reinforced concrete made of high-strength wires wound in pairs. Transp.stroi. 10 no.4:47-48 Ap '60. (MIRA 13:9)
(Reinforced concrete)

DMITRIYEV, O.V., inzh.

Prestressed reinforcements made of coiled large-diameter high-tensile wire. Trudy TSNIIS no.36:182-200 '60.
(MIRA 13:9)

(Wire) (Prestressed concrete)

DMITRIEV, P., POPOV, A.

Creameries

Model plan for a butter plant with a dried milk department. Moloch. prom. 14, no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

SOV/27-58-12-5/23

AUTHORS: Yagodinskiy, D., Deputy Chief of Oblast' Administration; Dmitriyev, P., Senior Inspector

TITLE: The Reorganization in the Training of Agricultural Machine Operators (O perestroyke podgotovki mekhanizatorov sel'skogo khozyaystva)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1958, Nr 12, p 10 (USSR)

ABSTRACT: The authors refer to suggestions made by the Glavnoye upravleniye trudovykh rezervov (Main Administration of Labor Reserves) that young people's general education be finished in the 8th grade, and that further training, which would include useful work, be continued in the town professional-technical schools for 2 to 3 years and in the village schools for 1 to 2 years. They feel that the Main Administration underrates the complexness and significance of agricultural production. They mention the knowledge agricultural workers should possess and recommend that greater attention be paid to the training of village youth. They consider that the curriculum of the village professional-technical school should cover a period

Card 1/2

The Reorganization in the Training of Agricultural Machine Operators

of at least 3 years, during which the students must also be engaged in useful work. They give details of the curriculum and indicate the subjects which should be included in the plan.

ASSOCIATION: Irkutskoye oblastnoye upravleniye sel'skogo khozyaystva (Irkutsk Oblast' Administration of Agriculture) and Irkutskoye oblastnoye upravleniye trudovykh rezervov (Irkutsk Oblast' Administration of Labor Reserves)

DMITRIYEV, P., (Eng-Capt 2d Rank)

DMITRIYEV, P., (Eng-Capt 2d Rank) - Author of article, "Training Ship's Petty Officers," which uses examples from the author's experiences to set down his ideas on training petty officers. The author notes that, in following the long-range petty-officer training schedule, attention must be given to those subjects in which it has been noticed that the seamen are weak, for it is the petty officer who teaches them. Practical training must occupy first place in the schedule, particularly during overhaul periods, when a man can actually get his hands inside a piece of machinery. Unfortunately, too many officers think only of getting the equipment back into working order again, and do not include petty-officer training in this work. The author also stresses the necessity of the individual approach in training one's subordinates and the importance of getting to know one's subordinates. This is best accomplished by frequent visits, not only on the job, but in the subordinates' quarters after hours, where talks and lectures may be held. Lastly, petty officers must be shown how they can become real assistants to their superiors, relieving them of small details or supplementing the work of the superior. (Krasnaya Zvezda, 26 Feb. 54)

SO: SUM 163, 19 July 1954

DMITRIYEV, P. (Irkutsk)

Former soldiers as builders of the Irkutsk Hydroelectric Power Station. Voen.znan. 31 no.9:16-17 S '56. (MLRA 9:11)
(Irkutsk Hydroelectric Power Station)

LANIN, V.; DMITRIYEV, P.

Record of production training. Prof.-tekh. obr. 19 no.9:20-21 S '62. (MIRA 15:10)

(Farm mechanization--Study and teaching)

DMITRIYEV, P. A.

Dissertation: "Investigation of the Work and Calculation of Junctions of Wooden Elements at an Angle by Round Steel Dowels." Cand Tech Sci, Moscow Order of Labor Red Banner Engineering Construction Inst imeni V. V. Kuybyshev, 11 May 54. Vechernyaya Moskva, Moscow, 3 May 54.

SO: SUM 284, 26 Nov 1954

DMITRIYEV, P.A., kand.tekhn.nauk

Investigating performance and calculating joints of wooden members set at an angle on round steel bars. Sbor. trud. MISI no.13:140-169 '58. (MIRA 11:8)

(Building, Wooden)

DMITRIYEV, P.

Potentials of an enterprise. Fin.SSSR 37 no.3:70-72 Mr '63.
(MIRA 16:4)

1. Zaveduyushchiy finansovym otdelom g. Kokhtla-Yarve Estonskoy SSR.

(Kohtla-Jarve—Slate)
(Kohtla-Jarve—Industrial management)

PARAMONOV, G.A., inzh.; PICHUGIN, A.A., kand.tekhn.nauk; VANEYEV, V.A., inzh.; KUZ'MINSKIY, A.G., inzh.; CHUYKO, A.V., kand.tekhn.nauk; VRUBLEVSKIY, L.Ye., inzh.; FURMAN, A.Ya., inzh. [deceased]; PEGANOV, G.N., inzh.; SHEFANOV, A.S., inzh.; DMITRIYEV, P.A., kand.tekhn.nauk; IVANOV, I.A., kand.tekhn.nauk; TEMKO, Yu.P., dotsent; SOKOLOV, P.K., dotsent; KANYUKA, N.S., kand.tekhn.nauk; SHPAKOVSKAYA, L.I., red.; GOSTISHCHEVA, Ye.M., tekhn.red.

[Handbook for the master builder on the technology of general building operations] Spravochnik mastera-stroitelia po tekhnologii proizvodstva obshchestroitel'nykh rabot. 2. izd.perer. i dop. Novosibirsk, Novosibirskoe knizhnoe izd-vo, 1961. 713 p. (MIRA 15:2)

(Building)

DMITRIYEV, P.A.

Our plans, problems, and work. Transp. stroi. 14 no.9:4-6 S '64 (MIRA 18:1)

1. Nachal'nik tresta Sevkavmorstroi.

AZROVA, TS.S.; ARKHIPOV, A.P.; VINOGRADOV, A.V.; GRABOVSKIY, I.V.; GRISHINA, R.I.; DMITRIYEV, P.D.; DUBINSKIY, Ye.L.; ZABRODIN, B.V.; KOLOTIY, M.V.; KRASNOV, B.S.; KURDYUKOVA, N.V.; L'VOVA, Yu.M.; OBUKHOVA, A.V.; FOMIN, V.G.; MEDVEDEVA, M.A., tekhn. red.

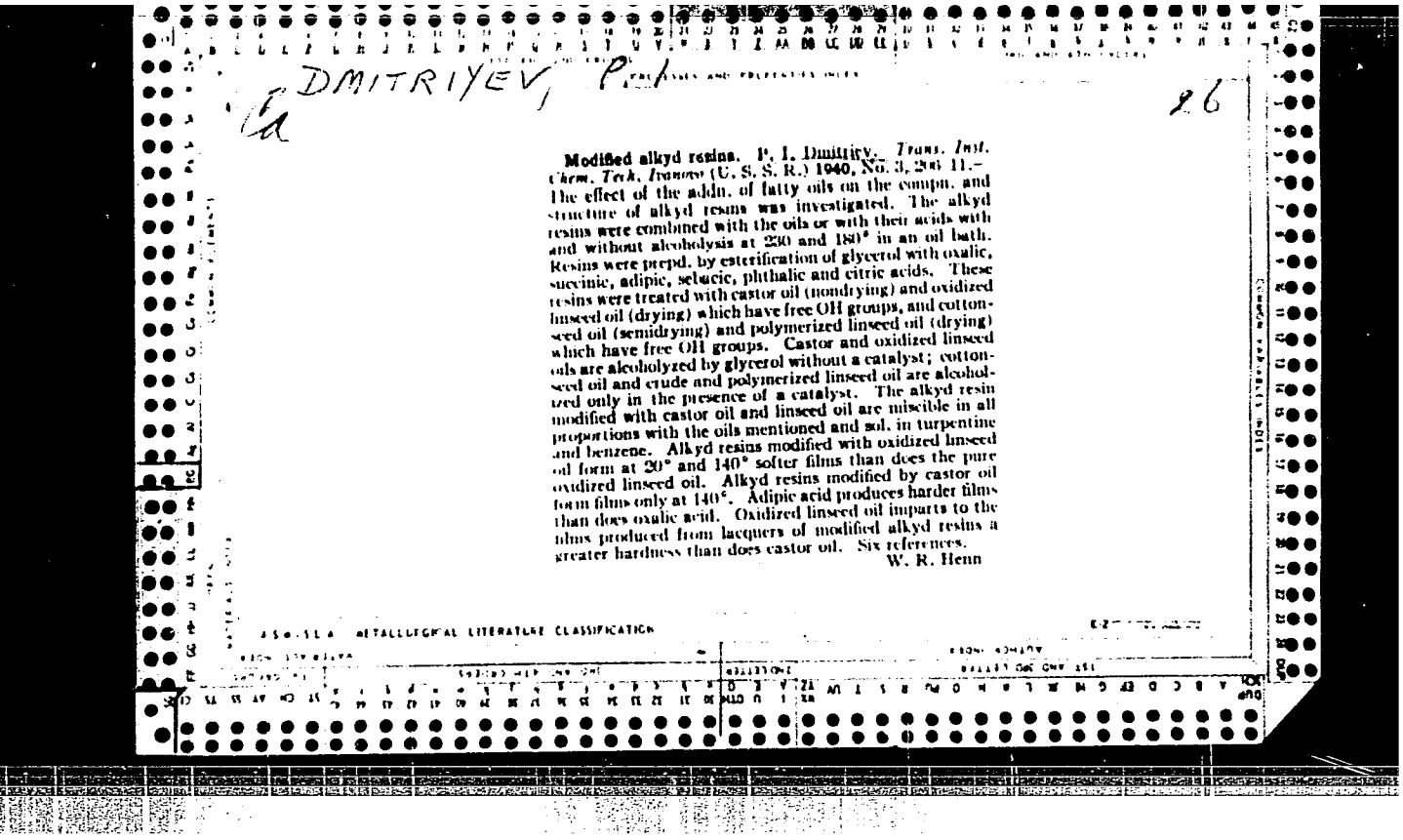
[Album of drawings of TE3, TE7, TE2, TE1, TEM1, and TU2 diesel locomotives; electric apparatus] Al'bom chertezhei teplovozov TE3, TE7, TE2, TE1, TEM1 i TU2; elektricheskie apparaty. Moskva, Transzheldorizdat. Vol.2. 1963. 394p. (MIRA 16:9)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye lokomotivnogo khozyaystva.

(Diesel locomotives--Electric equipment)

OKENKO, A.P.; SHASHKOVA, V.K.; DMITRIYEV, P.D.

X-ray analysis of locally isolated inclusions. Sbor. trud. TSNIICHM no.38:47-50 '64. (MIRA 18:3)



DMITRIYEV, P.I.

26

Modified alkyd resins. P. I. Dmitriyev. *Trans. Inst. Chem. Tech. Ivanovo* (U. S. S. R.) **1940**, No. 3, 206 11.—The effect of the addn. of fatty oils on the compn. and structure of alkyd resins was investigated. The alkyd resins were combined with the oils or with their acids with and without alcoholysis at 230 and 180° in an oil bath. Resins were prepd. by esterification of glycerol with oxalic, succinic, adipic, sebacic, phthalic and citric acids. These resins were treated with castor oil (nondrying) and oxidized linseed oil (drying) which have free OH groups, and cottonseed oil (semidrying) and polymerized linseed oil (drying) which have free OH groups. Castor and oxidized linseed oils are alcoholyzed by glycerol without a catalyst; cottonseed oil and crude and polymerized linseed oil are alcoholyzed only in the presence of a catalyst. The alkyd resin modified with castor oil and linseed oil are miscible in all proportions with the oils mentioned and sol. in turpentine and benzene. Alkyd resins modified with oxidized linseed oil form at 20° and 140° softer films than does the pure oxidized linseed oil. Alkyd resins modified by castor oil form films only at 140°. Adipic acid produces harder films than does oxalic acid. Oxidized linseed oil imparts to the films produced from lacquers of modified alkyd resins a greater hardness than does castor oil. Six references.

W. R. Henn

ASSIA METALLURGICAL LITERATURE CLASSIFICATION

BYKOV, K.P.; DMITRIYEV, P.I.

Faultless repair in depots. Zhel.dor.transp. 46 no.9:71-72 S '64.
(MIRA 17:10)

1. Glavnyy inzh. Privolzhskoy dorogi (for Bykov). 2. Nachal'nik proizvodstvenno-tekhnicheskogo otdela depo Balashov (for Dmitriyev).

L 47320-66 EWT(l)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/WW/JG

ACC NR: AR6025753 SOURCE CODE: UR/0058/66/000/004/A074/A074

AUTHOR: Borisova, L. A.; Boyko, E. N.; Dmitriyev, P. I.

52
B

TITLE: Crystallization of gallium arsenide from supercooled melts

SOURCE: Ref. zh. Fizika, Abs. 4A624

REF. SOURCE: Simpozium. Protsessy sinteza i rosta kristallov i plenok poluprovodnik. materialov, 1965. Tezisy dokl. Novosibirsk, 1965, 3

TOPIC TAGS: gallium arsenide, crystallization, single crystal growth, supercooling

ABSTRACT: A study was made of the influence of different factors on the processes of crystallization of GaAs from stoichiometric melts: the degree of superheat of the melt, rate of cooling, the degree of supercooling, and the time of "isothermal soaking" in the supercooled state. The interrelationship between these parameters and the number of crystallization centers during the solidification of the melt is considered. The data obtained makes it possible to choose optimal conditions for the production of GaAs single crystals from melts, using "isothermal soaking" of the melts in the supercooled state. [Translation of abstract].

SUB CODE: 20

Card 1/1 afs

DMITRIYEV, P.N., inzh.

New RV-20 flowmeter. Stroi. i dor. mash. 9 no.3:33-34 Mr '64.
(MIRA 17:6)

L 40769-65 EWT(d)/EWA(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) Pf-4
ACCESSION NR: AP5012331 UR/0286/64/000/022/0093/0094

18
17
B

AUTHOR: Dmitriyev, P. N.; Kazimirov, A. Ye.; Lesokhina, G. M.

TITLE: Hopper feeder on a forced air installation for transporting loose materials. Class 81, No. 166600

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1964, 93-94

TOPIC TAGS: conveying equipment

Translation: This inventor's certificate introduces a hopper feeder for a forced air installation which transports loose materials. The device includes a hopper which feeds the material alternately into two transfer hoppers equipped with feed valves. The material is transported from the transfer hoppers to a mixing chamber where the end of the main pipeline is located. At the end of the pipeline is a movable cone which controls the concentration of the mixture being transported along the line with compressed air. In order to transport the material by gravity feed from the transfer hoppers to the mixer, the transfer hoppers are mounted above the mixing chamber, and the conical dump valves are mounted where they are joined. Orig. art. has: 1 figure.

Card 1/2

L 40769-65
ACCESSION NR: AP5012351

ASSOCIATION: Leningradskiy filial vsesoyuznogo nauchno-issledovatel'skogo instituta stroitel'nogo i dorozhnogo mashinostroyeniya (Leningrad Branch of the All-Union Scientific Research Institute of Construction and Road Building Machinery)

SUBMITTED: 00 ENCL: 00 SUB CODE: IE

NO REF SOV: 000 OTHER: 000 JPRS

Card 2/2

DMITRIYEV, P.P.; USACHEV, V.V.; CHERNOV, M.F.

Some considerations concerning the formation and decomposition of a carbamide complex. Uzb.khim.zhur. no.6:74-82 '59. (MIRA 13:4)

1. Institut khimii AN UzSSR i Ferganskiy neftepererabatyvayushchiy zavod.
(Urea) (Hydrocarbons)

DMITRIYEV, P.P.

Thermal dehydration at atmospheric pressure for heavy crudes with a stable emulsion. Izv.AN Uz.SSR no.6:75-79 '56. (MIRA 14:5)
(Petroleum--Refining)

DMITRIEV, P. P.

USSR/Chemical Technology. Chemical Products and Their Application--Treatment of natural gases and petroleum. Motor fuels. Lubricants. I-14

Abs Jour: Ref Zhur-Khimiya, No 3, 1957, 9364

Author : Dmitriev, P. P., Ryabova, N. D., and Chernov, M. F.
Inst : Academy of Sciences Uzbek SSR
Title : The Preparation of Sulfofrezol from Southern Umbekistan Crude

Orig Pub: Izv. AN UzSSR, 1956, No 3, 67-71 (Uzbek summary)

Abstract: Termez crudes (TC) from southern Uzbekistan are characterized by high gum, S, and paraffin contents and a small yield of light fractions; the oil fractions are unstable even after extensive treatment. The S compounds in the oil fractions of TC have cyclic structures which considerably complicates sulfur removal. The authors have investigated the possibility of producing sulfofrezol (a lubricating-cooling oil used in metal

Card 1/2

4522. THERMAL METHOD OF DEHYDRATION OF HEAVY CRUDES WITH A STABLE EMULSION AT ATMOSPHERIC PRESSURE. Dmitriyev, P.P. (Inst. Akad. Nauk Uzbek. SSR (Bull. Acad. Sci. Uzbek S.S.R.), 1956, (6), 75-79; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1957, (5), 16839). The crude is treated at 98-100°C and above, i.e. at temperatures at which there is intensh frothing. Mixing with air or steam is used to prevent carryover. The water which separates out when the emulsion is broken goes into a trap. The time for heating and complete dehydration of Izhar Burgan crude containing 6 to 10% water was 4-6 h. At the same time solid impurities are removed practically completely, and the gasoline-ligroin fraction with an end point of 230-240° is extracted. The method is worth using on heavy tarry crudes which form a stable emulsion.

DMITRIYEV, P.P.; RYABOVA, N.D.

DMITRIYEV, P P

32-8-53/61

AUTHOR: None Given

TITLE: Short Reports (Korotkiye soobshcheniya).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8, pp. 1002-1004 (USSR)

ABSTRACT: Dmitriyev, P.P. (Tashkentskiy khimicheskiy institut Akademii nauk UzSSR) suggested an alteration in the already known apparatus for oil-refining and determining the effective boiling points of mineral oil products according to Badgadzher in that the separation of the fractions does not take place in the Kleisen-pistons but in the apparatus itself, which permits a reduction of the time needed for the experiment, the elimination of losses and greater accuracy. There are 2 figures.

Krishtul, V.P. and Paskutskaya, L.N. (Akademiya kommunal'nogo khozyastva) suggested a kind of water jet-sucking pump to be used for emptying the vessels after the experiments are finished, which is assumed to offer technical-practical advantages. There is 1 figure.

Skopin, Yu.A. (Kazakhskiy sel'skakhozyaystvennyy institut) suggested a device for gas washing which offers the advantage that the washing liquid can be used without shutting off the gas and in which the gas washing process takes place between the bottoms of two telescoped vessels. There is 1 figure.

Card 1/3

Korshunov, V.I. (Institut goryuchikh iskopayemykh Akademii nauk SSSR) suggested an apparatus for the fraction analysis of dispersive minerals. The apparatus consists of a cylindric vessel the lower end of which forms a cone and is connected to a tube where a straight-way cock is provided. At the side, in the middle of the cylinder, there is a feeder through which the fine-grained mineral is fed, mixed with a liquid which has approximately the same specific weight. The lighter fractions, which rise up are caught by the channel provided above; the heavier ones, which are deposited below, are eliminated by the straight-way cock.

Simonyan, A.A. (Moskovskiy torfyanoy institut) suggested an apparatus for the determination of the maximum of the shearing stress and the coefficients of the lateral pressure of the plastic materials (chalk, peat, etc.). The apparatus consists of a horizontally fixed tube of several parts which can easily be dissembled into its individual parts and has inside a thread-like cut which prevents the displacement of the material it contains. One of the branches of the tube has an inductor for measuring the lateral pressure. The pressure is caused by a piston, which is introduced into the tube. The other end of the tube is fitted with a closing device. The number of the parts of the tube is reduced by dismantling them as required. Examples of application, 1 figure.

Chernetsov, M.M. (Moskovskiy lesotekhnicheskiy institut) worked out the method for the production of the prescribed wooden samples for the examination of the maximum of the lateral extension of the wood: in this case a specially steel sample is used. 1 figure.

Funke, V.F. (Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov) suggested a scheme of a furnace for the hardening of the samples at temperatures of up to 1600°. Heating takes place here in a neutral sheltered atmosphere and is regulated by the autotransformer. Examples of application are given. There is 1 figure.

AVAILABLE: Library of Congress

Card 3/3

KHODZHAYEV, G.Kh.; RYABOVA, N.D.; DMITRIYEV, P.P.; ALIYEV, Ya.Yu., kand. khim.nauk, otv.red.; LUNEZHEVA, M.S., red.izd-va; GOR'KOVAYA, Z.P., tekhn.red.

[Petroleums of Uzbekistan] Nefti Uzbekistana. Tashkent, Izd-vo Akad.nauk UzSSR, 1958. 241 p. (MIRA 13:2)
(Uzbekistan--Petroleum--Analysis)

ABIDOVA, Z.Kh.; KHODZHAYEV, G.; DMITRIYEV, P.P.; BUROVA, Ye. G.

Determination of the composition of Isbaskent gasoline by combined method. Uzb. khim. zhur. no. 1:53-67 '58. (MIRA 11:7)
(Isbaskent--Gasoline)

USACHEV, V.V.; DMITRIYEV, P.P.; GEYFEN, S.I.

Production of low pour point diesel fuels from Fergana oils by the method of carbamide dewaxing. Uzb.khim.zhur. 6 no.6:67-78 '62. (MIRA 16:2)

1. Institut ispol'zovaniya topliva AN UzSSR, Sovet narodnogo khozyaystva UzSSR i Institut khimii AN UzSSR.
(Diesel fuels) (Fergana—Petroleum)

DMITRIYEV, P.P.; MAT'YAKUBOV, D.

Physicochemical properties of oxidized bitumens from South Uzbekistan oil. Uzb. khim. zhur. 7 no.4:74-78 '63.
(MIRA 16:10)

1. Institut khimii AN UzSSR.

DMITRIYEV, P.P.; ALIMUKHAMEDOV, N.Kh.; NIKOLAYENKO, K.G.

Stabilization of Vannovka illuminating kerosene. Uzb. khim. zhur. 7 no.6:98-101 '63. (MIRA 17:2)

1. Institut khimii AN UzSSR.

L 48835-65 EWT(m)/EWP(t)/EWP(b)/EWA(h) IJP(c) JD/DM

ACCESSION NR: AP5005312 S/0089/65/018/002/0184/0185

AUTHOR: Dmitriyev, P. P.; Krasnov, N. N.

TITLE: Excitation function of the reaction $Cu^{65}(d, 2n)Zn^{65}$ and the yield of Zn^{65}

SOURCE: Atomnaya energiya, v. 18, no. 2, 1965, 184-185

TOPIC TAGS: deuteron bombardment, deuteron reaction, copper, zinc, isotope separation, radioactive isotope

ABSTRACT: In view of the contradictory results of earlier investigations, the authors measured the excitation function and the Zn^{65} yield at deuteron energy 20 MeV. The yield was determined by two methods - irradiation of a thick copper target and irradiation of a stack of copper foils. When the foils were used, the excitation function of the reaction $Cu^{65}(d, 2n)Zn^{65}$ is obtained simultaneously with the yield. The procedures employed in both methods are described in some detail. Methods of eliminating the background are described. The results are shown in Fig. 1 of the Enclosure, where data obtained by others are shown for comparison. The reasons for some of the discrepancies are discussed. The work was

Card 1/3

L 48835-65
ACCESSION NR: AP5005812

4

performed in the 1.5 m cyclotron at the Fiziko-energeticheskiy institut (Physics and Power Institute). "The authors thank O. A. Sal'nikov for useful remarks, Z. P. Dmitriyev for the calculations, and Yu. G. Sevast'yanov and Yu. P. Pen'kov for radiochemical separation of the zinc and cobalt." Orig. art. has: 1 figure and 2 formulas.

ASSOCIATION: None

SUBMITTED: 20Feb64 ENCL: 01 SUB CODE: NP

NR REF SOV: 005 OTHER: 005

Card 2/3

L 43835-65
ACCESSION NR: AP5005812

ENCLOSURE: 01

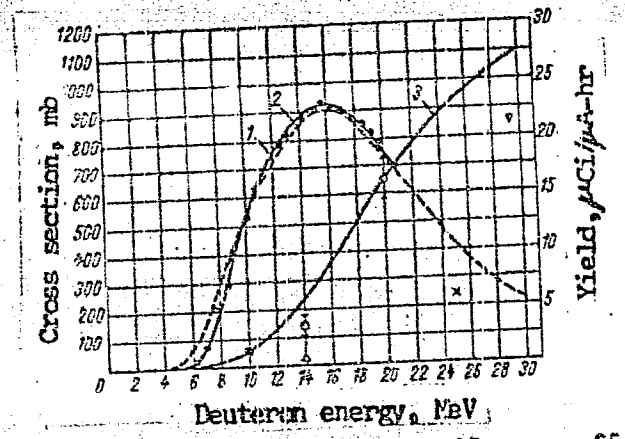


Fig. 1. Excitation function of reaction $Cu^{65}(d,2n)Zn^{65}$ and dependence of the yield of Zn^{65} on the deuteron energy for a thick copper target:

1 - experimental excitation function, 2 - theoretical excitation function, 3 - Zn^{65} yield, o - present data.

Card 3/3

L 4032-66 EWT(m)/EWA(h) DM
ACCESSION NR: AP5027962 UR/0089/65/019/001/0062/0063

AUTHOR: Krasnov, N. N.; Dmitriyev, P. P.; Sevast'yanov, Yu. G.; Bezmaternykh, A. S.

TITLE: Production of sup 26 Al during irradiation of Mg with 20-Mev deuterons

SOURCE: Atomnaya energiya, v. 19, no. 1, 1965, 62-63

TOPIC TAGS: aluminum, radioisotope, irradiation, magnesium, deuteron, gamma spectrum, deutron beam, isotope separation

ABSTRACT: High specific-activity sup 26 Al was obtained in the reactions sup 25 Mg(d,n) and sup 26 Mg (d,2n) by irradiating Mg with a 20-Mev deuteron beam. The steps involved in the separation of the radiochemically pure Al are listed. The sup 26Al gamma spectrum, measured on a scintillation spectrometer, is presented. The activity of the sup 26 Al source was measured by comparison of the 511-kev gamma line intensity with a sup 22 Na standard and of the 1830-kev intensity with a sup 88 Y standard. "The authors thank Z.P. Dmitriyeva for the carrying-out of the measurements on the spectrometer." Orig. art. has: 1 graph and 1 table.

ASSOCIATION: none

SUBMITTED: 20Jul64 ENCL: 00 SUB CODE: NP

NO REF SOV: 002 OTHER: 004 NA

Card 1/1 SDP

L 35356-66 EWT(m)

ACC NR: AR6017805 SOURCE CODE: UR/0058/66/000/001/A065/A065

AUTHOR: Vartanov, N. A.; Dmitriyev, P. P.; Krasnov, N. N.; Samoylov, P. S.

TITLE: Radioactive decay of tellurium-117

SOURCE: Ref. zh. Fizika, Abs. 1V151

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr. vyp. 1, 1964, 233-237

TOPIC TAGS: tellurium, radioactive decay, nuclear energy level, Gamma spectrum, Alpha interaction, neutron interaction, line intensity

ABSTRACT: To determine more accurately the decay scheme, a study was made of the γ spectrum of Te^{117} obtained via the reaction $Sn^{114}(\alpha,n)$. The measurements were made with a scintillation gamma spectrometer with NaI(Tl) crystal measuring 40 x 40 mm. The energy resolution for the 662-kev γline was 8.5%. Careful graduation of the crystal efficiency was carried out in the energy range 265 - 2760 kev. The following values were obtained for the energies (in kev) and for the relative γ-line intensities: 730 ± 10 (100), 940 ± 15 (4.5 ± 3), 1080 (5.5 ± 1.2), 1310 ± 20 (14 ± 2), 1740 ± 25 (16.5 ± 1.5), 2230 ± 25 (17.4 ± 2). The data obtained confirm in general outline the decay scheme proposed by Fink et al. (RZhFiz, 1962, 7B257). N. Voinova. [Translation of abstract]

SUB CODE: 18, 20

ACC NR: AP7007579 SOURCE CODE: UR/0089/66/020/001/0057/0059

AUTHOR: Krasnov, N. N.; Dmitriyev, P. P.

ORG: none

TITLE: Sup 57 Co yields in cyclotron

SOURCE: Atomnaya energiya, v. 20, no. 1, 1966, 57-59

TOPIC TAGS: cyclotron, Mossbauer effect, cobalt, radioisotope

SUB CODE: 20, 18

ABSTRACT: There is a great demand for ^{57}Co in connection with the many studies on the Mossbauer effect. Three methods of preparation of this isotope by nuclear reactions were examined. They include: 1. irradiation of iron by deuterons, $^{56}Fe(d,n)^{57}Co$; 2. irradiation of nickel by protons, $^{58}Ni(p,2p)^{57}Co$; $^{58}Ni(p,pn)^{57}Ni \rightarrow {}^{57}Co$; $^{58}Ni(p,2n)^{57}Cu \rightarrow {}^{57}Ni \rightarrow {}^{57}Co$; $^{60}Ni(p,\alpha)^{57}Co$; and 3. irradiation of Ni by α particles, $^{58}Ni(\alpha,\alpha p)^{57}Co$; $^{58}Ni(\alpha,\alpha n)^{57}Ni \rightarrow {}^{57}Co$. The dependence of the total ^{57}Co yield on the total energy of the particles was examined by determining the absolute ^{57}Co activity of specially shielded iron and nickel foils, on the basis of the photopeak of the 126-kev γ line. Activity measurements were also made on Co separated from the targets a few months after the irradiation. In cyclotron preparation of isotopes, in addition to the actual yield, the permissible power level of the incident beam must also be taken into account; therefore, the results were expressed not only in $\mu C/\mu amp.\ hr$ units, but also in $\mu C/kwh$. It was found that irradiation of

UDC: 539.172.12

ACC NR: AP7007579

nickel with 22-Mev protons is the most efficient reaction for preparing ^{57}Co. In the proton irradiation of nickel, ^{55}Fe is also formed according to the reaction $^{58}Ni(p,\alpha)^{55}Co \rightarrow {}^{55}Fe$; it may be removed from the mixture. Irradiation of Mn with α particles yields a product containing relatively large amounts of ^{56}Co and ^{58}Co; similar difficulties arise in the irradiation of Fe with α particles and of Ni with deuterons. The present work was carried out on 1.5m cyclotron at the Physical Energy Institute, of the USSR State Committee on Atomic Energy Use. Orig. art. has: 1 figure, 1 formula and 1 table. [NA]

Card 2/2

S/081/61/000/024/068/086
B102/B108

AUTHORS: Usachev, V. V., Dmitriyev, P. P.

TITLE: Fractioning of n-paraffins by decomposition of the carbamide complex

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1961, 468, abstract 24M73 (Uzb. khim. zh., no. 3, 1961, 64 - 74)

TEXT: Narrow fractions of n-paraffin hydrocarbons are proposed to be produced via formation of a complex by means of carbamide with the initial hydrocarbon mixture, and subsequent decomposition of this complex by fractional addition of various portions of water. The following was obtained: a) 10 fractions of n-paraffins with solidification temperatures between 18 and 36°C from the diesel fuel of the ferganskiy neftepererabatyvayushchiy zavod (Fergana petroleum refining plant); b) 11 fractions with solidification temperatures between 9 and 30°C from a soft paraffin of a Moscow plant. A method of multiple fractioning is proposed which is based on the following: the n-paraffin fractions resulting from successive decomposition of the complex are again introduced, each

Card 1/2

Fractioning of n-paraffins... S/081/61/000/024/068/086
B102/B108

separately, into complexes with carbamide which are subsequently subjected to another decomposition by water. 40 narrow fractions with solidification temperatures between -9 and 32°C were obtained as a result of the multiple fractioning of the soft paraffin with 14° solidification temperature. These fractions differ only little in their refractive indices and specific weights. [Abstracter's note: Complete translation.]

Card 2/2

AUTHORS: Dmitriyev, P.P., Krasnov, N.N., Khaprov, Ye.N. 89-7-9/32

TITLE: On the Problem of the Deflection of a Bundle in a Cyclotron (K voprosu ob otklonenii puchka v tsik[illegible]otrone)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 7, pp. 45-47 (USSR)

ABSTRACT: At first some previous works dealing with this subject are discussed. The experiments for the production of a deflected bundle were carried out by means of a meter cyclotron. According to computation a deuteron energy of 10.6 MeV corresponds to the output radius of 44 cm. The magnetic field here decreases by 2.2% and the coefficient for the decrease of the magnetic field amounts to n = 0.2. A schematical section through the chamber of the cyclotron is shown by a schematical drawing. An ion source with covered-up arcs was used on the occasion of these experiments. The shifting of the source and the control of its location takes place by remote control without switching off of the cyclotron. The high voltage is transferred into the duants in form of pulses with a frequency of 200 pulses per sec. The voltage amplitude between the duants amounts to from 90 to 100 kV. The current intensity of the inner bundle amounts to from 800 to 100 micro-

Card 1/2

On the Problem of the Deflection of a Bundle in a Cyclotron 89-7-9/32

amperes within the pulse. The current intensity of the deflected bundle can be registered on three places by means of the targets M1, M2, and M3. Measuring takes place simultaneously by means of a thermal and an electric method. The first experiments were carried out by means of the usual deflector with plane electrodes. With the shifting of the ion source a sharp maximum in the current intensity of the deflected bundle is observed. With the modification of the amplitude of the voltages between the duants a new location of the source had to be chosen for the purpose of obtaining the maximum current intensity. (Numerical data are given). It was possible to increase the current intensity of the deflected bundle (on the target M1) up to from 45-50% of the current intensity of the interior bundle. Next, a deflecting system with hyperbolic electrodes was investigated. The current intensities registered on all three exterior targets were equal to one another, which signifies a shortening of the horizontal dimensions of the bundle. There are 3 figures and 6 references, 4 of which are Slavic.

SUBMITTED: February 8, 1957

AVAILABLE: Library of Congress

Card 2/2 1. Ion bundles - Deflection - Test results 2. Cyclotrons - Operation

DMITRIYEV, P.P

21(5) p.3 PHASE I BOOK EXPLOITATION SOV/1297

Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniy v narodnom khozyaystve i nauke, Moscow, 1957

Polucheniye izotopov. Moshchnyye gamma-ustanovki. Radiometriya i dozimetriya; trudy konferentsii... (Isotope Production. High-energy Gamma-Radiation Facilities. Radiometry and Dosimetry; Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science) Moscow, Izd-vo AN SSSR, 1958. 293 p. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR; Glavnoye upravleniye po ispol'zovaniyu atomnoy energii SSSR.

Editorial Board: Frolov, Yu.S. (Resp. Ed.), Zhavoronkov, N.M. (Deputy Resp. Ed.), Aglintsev, K.K., Alekseyev, B.A., Bochkarev, V.V., Leshchinskiy, N.I., Malkov, T.P., Sinitsyn, V.I., and Popova, G.L. (Secretary); Tech. Ed.: Novichkov, N.D.

Card 1/12

PURPOSE: This collection is published for scientists, technologists, persons engaged in medicine or medical research, and others concerned with the production and/or use of radioactive and stable isotopes and radiation.

COVERAGE: Thirty-eight reports are included in this collection under three main subject divisions: 1) production of isotopes 2) high-energy gamma-radiation facilities, and 3) radiometry and dosimetry.

TABLE OF CONTENTS:

PART I. PRODUCTION OF ISOTOPES

This article describes the basic structural features of an ultra-high-temperature ion source and gives the results of its use in separating Pd, Pt, Ru, and Ir in a small electromagnetic separator. A hot cathode discharge is maintained in vapors of the element being separated and isotope ions are drawn from the gas discharge chamber through an aperture. A lateral electron beam with energies of 20-25 kev creates chamber temperatures up to 2800° C.

requiring high dosage (microorganisms, biological substrates) c) industrial radiation of biological products requiring sterilization, preservation, disinfection, etc. d) medical and therapeutical purposes.

Breger, A. Kh., V.A. Belynskiy, V.L. Karpov, S.D. Prokudin and V.B. Osipov. Facility for Radiation-Chemical Research Employing Co^{60} Gamma-Radiation Source With an Activity of 21,000 g-ev of Radium 182

A K-20000 Co^{60} gamma-radiation source, cited as the most powerful in the world according to available data, is described and basic parameters tabulated. The unit is provided with a control panel and a system of periodic observation and is capable of 1200 r/sec dosage per 0.4 liters and ~100 r/sec per 100 liters volume. Working chamber capacity is ~300 liters. The source, comprising 56 standard Co^{60} preparations, the authors state, is safe for attending personnel owing to a "dry" method especially developed for this unit.

General description and electric circuit diagrams are given for a pocket-sized radiometer intended for approximate determination of gamma- and hard beta-ray intensities above 1 Mev. Time lapse after onset of radiation registration serves as a parameter for the determination of intensity up to 1000 μr/hr with an accuracy of ± 20 percent. Working principle, components and electric circuit diagram are given for a pocket-size dosimeter capable of detecting approximate intensities of gamma- and beta-radiation from 0.1 to 5000 μr/sec and

and above 0.2 Mev, respectively.

AVAILABLE: Library of Congress

TM/atr
4-10-59

Card 12/12

21(8)

AUTHORS: Guldamashvili, A. I., Dmitriyev, P. P. SOV/89-5-6-18/25
Krasnov, N. N., Mishin, V. Ya.,
Khaprov, Ye. N.

TITLE: The Production of the Isotope As^{74} by Means of a Cyclotron (Polucheniye izotopa As^{74} na tsiklotrone)

PERIODICAL: Atomnaya energiya, 1956, Vol 5, Nr 6, pp 660 - 661 (USSR)

ABSTRACT: As^{74} was obtained by the irradiation of metallic germanium with the external 10,8 MeV deuteron beam of the cyclotron (Ref 5).
The characteristic feature of the target was the fact that the cooling water immediately reached the inner surface of the irradiated germanium plate. The germanium plate was cast in a vacuum and was then ground to the dimensions 170.40.4 mm^2. The deuteron beam (60-70 μA) is limited by a shutter so that only a surface of 150.25 mm^2 of the germanium was irradiated. The water consumption was 5 l/m.
Chemical separation was carried out as follows: After the irradiated sample had been boiled twice (for 15 to 20 minutes) in aqua regis, about 97-98 % of the activity had dissolved.

Card 1/3

The solution was steamed-in and extracted with 11 n HCl (method according to reference 6). The arsenic carrier used weighed 50 μg. Concentration of the arsenic isotope was carried out by the Marsh method (arsenic hydride). The two preparations, which were enclosed in an ampoule of 0,6 cm^3, had an initial activity of 60 mC. The As^{74} activity was measured by comparison with a Co^{60} source by means of the micro-roentgenometer of the type "Kaktus" 30 days after irradiation. The total yield obtained by the formation of As^{74} was:
25 μC/μA.h± 15 %. The half time was: $T_{1/2}$= 18,4±0,4 d.
Professor B. S. Dzhelepov, I. P. Selinov, and Ye. Ye. Baroni interested themselves in this work. M. Z. Maksimov calculated the yield curve. Yu. A. Bliodze and I. I. Zhivotovskiy assisted in carrying out experiments. There are 2 figures and 10 references, 3 of which are Soviet.

The Production of the Isotope As^{74} by Means of a Cyclotron

SOV/89-5-6-18/25

SUBMITTED: September 13, 1958

Card 3/3

AMOSOV, V.N.; GRUZDOV, P.Ya.; DMITRIYEV, P.S.; YELISEYEV, M.M.; KIRILLOV, M.I.; SKOTNIKOV, V.V.; YEVSEYEV, A.S.

High-strength cast iron containing sulfur and prospects for its use in the automobile industry. Avt. prom. no. 1:34-37 Ja '61. (MIRA 14:4)

1. Yaroslavskiy motornyy zavod, i Nauchno-issledovatel'skiy tekhnologicheskiy institut avtomobil'noy promyshlennosti.
(Cast iron) (Automobiles--Materials)

DMITRIYEV, P.T., master.

First place eight times in one year. Elek. i tepl. tiaga no.2: 10 F '57. (MLRA 10:5)

1. Tyagovaya podstantsiya Panki Moskovsko-Ryazanskoy dorogi.
(Electric railroads--Substations)